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EASTMAN

January 21, 2009

Via email: GC-62@hq.doe.gov

Via Mail:

Office of the Assistant General Counsel for
Technology Transfer and Intellectual Property
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

ATTN: TECHNOLOGY TRANSFER QUESTIONS

Dear Sir or Madam:

This letter is in response to the Notice of Inquiry: Technology Transfer Practices at Department of Energy ("DOE") Laboratories. (Federal Register Vol. 73, No. 229, p. 72036). The following comments are respectfully submitted on behalf of Eastman Chemical Company ("Eastman").

Eastman is a global FORTUNE 500 company with 2007 sales of $6.8 billion and approximately 10,500 employees which is headquartered in Kingsport, Tennessee. We manufacture and market more than 1,200 products that enhance the lives of people around the world every day. Eastman spends in excess of $160 M on Research and Development and has a significant strategic focus on preparing chemical materials from coal and other solid feedstocks. In support of our various research activities we have funded research programs at a number of DOE Labs and have several active programs at two specific labs, as well as have ongoing relationships and discussions with most major DOE labs. We also have funded research programs with a number of Universities and Research Institutes in the US as well as in Europe and Asia.

General Comments
Eastman hereby offers the following general comments associated with funded external research.

In general, a private company like Eastman will work with a Government Lab, University or other Research Institution for one or more of the following reasons.

1) Access to Unique Capabilities or Skill Sets;
2) Ability to explore new technical areas without making long term facility and people commitments;
3) Access to Ideas and Technologies (i.e. to expand the 'brain pool' beyond our company);
4) Strategic relationships and partnerships that enable win-win propositions for all parties; and
5) To handle short term resource needs in periods of high demand.

While all of these reasons are operative when we work with Government Labs, items 1 and 3 (Access to Capabilities and Skill Sets and Access to Ideas and Technologies) are two of the primary reasons we work with Government Labs. While we can categorize the reasons for such external research projects, the exact nature of each project tends to be unique and thus we have learned that no single model fits all such interactions. The structure of each interaction must take into account the relative nature of the work; resources brought to the program by each party (including background Intellectual Property) and desired project outcome(s).

In addition to these project considerations, there are more general issues driven by the nature of the industry that the sponsoring partner represents which will vary significantly with industry sector. For example, terms common and acceptable for a biotechnology or pharmaceutical company are likely not to be appropriate for an interaction with a chemical company. Among the factors that will impact the appropriateness of the terms of a given interaction include the typical profit margins and volume of the material to be sold as well as the innovation pathway to commercialization. An example of the issues associated with this 'innovation pathway' is the typical sequence of steps necessary to develop a new chemical process or chemical material. Once the new material or key chemical process is invented in a laboratory, a significant amount of work and expenditure is required to achieve final commercialization of the process or product. These activities include toxicological testing, pilot plant demonstration, market development, engineering and construction of the commercial plant and, finally, startup of the facility. The vast amount of expense (greater than 95%) and ALL of the risk is typically in these later stages which are almost always handled by the private firm that has contracted the work. We have observed a troubling trend over the last several years of universities seeking to retain Intellectual Property for work funded by private companies. In some cases and some industries this may be appropriate, but in most cases this is inappropriate. In many situations, insistence on such terms has led us to abandon attempts to work with a given university, often resulting in our going to facilities overseas.

In the following comments we are specifically addressing circumstances where the resulting work is produced via sponsored research by the corporate client. In cases where there is IP produced at the government lab as a result of government funding independent of private funds, the existing processes wherein the interested party enters into licensing agreements and pays mutually agreed upon and reasonable remuneration for access to the technology continues to be appropriate.

Specific Questions

Eastman hereby submits the following comments to specifically address Questions 2 (Best Practices) and 4 (Intellectual Property Rights in Work for Others).

Question 2 - Best Practices: We have found that personnel experienced in the contracting issues are essential on both sides of the discussion. Staff must have knowledge of issues associated with management of confidentiality, research contracting and IP issues. We have observed that some laboratories have separate groups handle the confidentiality, contracting and IP sections of contracts. This makes for a suboptimum process at best and has the potential for significant delays. Alignment of personnel by specific industry area is a best practice, since it allows the individual to become knowledgeable about the issues with both the industry and, with time, the specific client company. In many cases timeliness is key and it is important to either reach agreement or determine that such agreement will not be reached quickly. Experienced contract and tech transfer professionals who can identify the key issues, determine which ones can be managed and which are potential barriers to reaching agreement, help both parties come to a timely resolution, which is ultimately in the interest of all parties.

Question 4 – Intellectual Property Rights in Work for Others ("WFO"). We are very concerned about these contemplated changes. Before addressing the specific subquestions, it is worth discussing when WFO is an appropriate vehicle as well as our view on the statement in the questions that the proposed changes are a *norm.*

We have found that WFO arrangements are appropriate when work is envisioned in large part or entirely by the corporate client for areas of specific commercial interest to the client. In such situations the company tends to have substantial activity and commercial interest in the project area. The choice of the DOE Lab as a partner is often due to facilities and/or personnel with skills that fit client needs. Under the current WFO terms, the corporate client is able to essentially use the DOE Lab as an extension of their research operation with similar handling of IP and other work product. It should be recognized that funded work at DOE, or any government lab, is very costly due to the high overhead associated with the unique facilities. Thus, a private concern is highly unlikely to enter into a WFO arrangement absent a compelling reason to work with the lab. Furthermore, these projects are only entered into when the high cost associated with the work is justified by the facilities and/or people at the DOE Lab as well as the clarity around IP ownership afforded by the WFO. Adding uncertainty around use and disposition of work product will in many circumstances make the cost associated with the collaboration a significant issue.

As a second general point, we would like to address the issues around what is the '*norm*' for contracted research. In the discussion of the question, the Federal Register Notice states that the proposed changes are *'the norm under sponsored research at most universities'*. As stated above, we find that the range of situations as well as issues associated with needs unique to different industrial segments, make insistence on such principles problematic. In as much as this may be a *norm* with some institutions, we consider this purported *norm* to be a dysfunctional practice which results in significant problems. As stated above, when this practice is strictly adhered to by a university, we are often forced to take the potential project to non-US institutions. For these and reasons stated below, we believe adopting this policy would be detrimental to industrial-government lab collaborations.

Subquestion (i) Effect on attractiveness of WFO agreements. These changes would make WFO and work with DOE or other government labs much less attractive. Circumstances may certainly exist where an industrial partner could accept such terms, but it would without doubt limit the scope and nature of our interactions with government labs. These changes would also likely increase the length of time necessary to implement an agreement, increase confusion associated with expectations of each party and result in less industrial involvement with government labs. As stated in the general comments above, the needs and situations differ significantly by industry sectors and types. Adoption of the proposed changes in IP terms for WFO will likely result in specific industrial sectors now being discouraged from working with DOE labs. Many of the disadvantaged sectors, such as chemicals, may be the very ones that are most appropriate for collaborations with DOE Labs.

Subquestions (ii) & (iii) Other Options and Desired IP Disposition. We will address these issues together. As stated above, we believe that the WFO does not require changes. It is recognized that WFO is not appropriate for all circumstances. In particular situations where significant background IP exists at the DOE Lab, as evidenced by patents and publications, a WFO may not be appropriate and other arrangements may be more appropriate. In some cases, modifications such as exclusive licenses within a given field of use may be appropriate as well. One of the most important issues to a sponsoring company is that the company must be able to enter into a sponsored research agreement and have clarity around right to practice or use the resulting work from this research. Terms such as those proposed do not address that essential need and hence will be problematic if widely adopted.

Subquestion (iv) March-in-Rights and other terms. To companies who have little experience working with government labs, March-in-Rights are troubling. However, with experience one learns that these are rarely executed rights that are necessary to maintain US National Interests. We recognize these interests and can accept these rights as a necessary trade-off when working with DOE and other government labs. In general, the complexities of government contracts combined with the frequency with which we do such projects are such that we do not have comprehensive in-house expertise on these agreements. The net result is that we find it necessary to retain outside counsel that specializes in such governmental contracts to assist with the various contractual issues. This ensures appropriate review and understanding on our end, but adds to the overall cost of such contracts over and above the program costs. This cost needs to be recognized as part of the overall 'cost of doing business' with DOE and other government labs and, as previously stated, further adding complexity to the process will add both direct and indirect costs, while making the potential benefits from such interactions less desirable overall.

Eastman appreciates the opportunity to submit comments to the "Notice of Inquiry" initially referenced in this letter. Please contact the Eastman representative indicated below for any clarification or additional information associated with this response.

Sincerely,

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